

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Canceled)
2. (Original) An AM neighboring interference removing circuit for removing AM neighboring interference of an AM receiver, comprising:
  - a first local oscillator for generating an oscillation output having a frequency of  $f_{p1}$ ;
  - a second local oscillator for generating an oscillation output having a frequency of  $f_{p2}$ ;
  - a first multiplier for multiplying an AM stereo modulation wave desired to be received, by the oscillation output from said first local oscillator;
  - a second multiplier for multiplying the AM stereo modulation wave desired to be received, by the oscillation output from said second local oscillator;
  - a first low-pass filter for removing high frequency components contained in an output of said first multiplier;
  - a second low-pass filter for removing high frequency components contained in an output of said second multiplier;
  - a subtractor for subtracting an output of said second low-pass filter from an output of said first low-pass filter; and
  - a low-pass filter for receiving an output of said subtractor and having a cut-off frequency of  $f_c/2$ ,wherein  $f_c$  is a carrier frequency of an interference AM modulation wave causing neighboring interference,  $f_{p1} > f_{p2}$ , and  $f_{p1} - f_c = f_c - f_{p2}$ .

3. (Original) An AM neighboring interference removing circuit for removing AM neighboring interference of an AM receiver, comprising:

a first local oscillator for generating an oscillation output having a frequency of  $(fp1 + fa)$ ;

a second local oscillator for generating an oscillation output having a frequency of  $(fp2 - fa)$ ;

a third local oscillator for generating an oscillation output having a frequency of  $(fp2 + 3fa)$ ;

a first multiplier for multiplying an AM stereo modulation wave desired to be received, by the oscillation output from said first local oscillator;

a second multiplier for multiplying the AM stereo modulation wave desired to be received, by the oscillation output from said second local oscillator;

a third multiplier for multiplying the AM stereo modulation wave desired to be received, by the oscillation output from said third local oscillator;

a first low-pass filter for removing high frequency components contained in an output of said first multiplier;

a second low-pass filter for removing high frequency components contained in an output of said second multiplier;

a third low-pass filter for removing high frequency components contained in an output of said third multiplier;

a subtractor for subtracting outputs of said second and third low-pass filters from an output of said first low-pass filter; and

a band-pass filter for receiving an output of said subtractor and having a band-pass frequency in a range from  $(fc/2 - fa)$  to  $(fc/2 + fa)$ ,

wherein  $fc$  and  $(fc + 2fa)$  are carrier frequencies of interference AM modulation waves causing neighboring interference, being lower and higher by a frequency  $fa$  from an AM carrier frequency of the AM stereo modulation wave desired to be received,  $fp1 > fp2$ , and  $fp1 - fc = fc - fp2$ .